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Column 423

Shroom BOOM coming soon

by Sarah Locke

On charred and blackened land around the Yukon, little miracles are taking place in the soil. For years, maybe decades, masses of tiny filaments have been growing and spreading underground, absorbing nutrients and biding their time.

Most fungi, and all mushrooms, produce these slender strands, which are known as mycelia. Last year's forest fires should trigger one particular type of fungus to burst into full bloom this summer, producing a bumper crop of highly-prized morel mushrooms.

Last year's forest fires could create a morel mushroom bonanza in the Yukon this summer.

(photo: Government of Yukon)

The mushrooms coveted by chefs and gourmands around the world are actually the fruiting bodies of the organism. With a bit of rain, the Yukon could have luxuriant growths of morels this summer, and their furrowed and bell-shaped caps could start poking through the soil in a matter of weeks.

Dried morels can sell for more than $100 dollars per pound, and every summer itinerant groups of mushroom pickers roam from burn area to burn area, looking for these precious fungi. Since about 1.7 million hectares of the territory burned last summer, no doubt the Yukon will be a destination for many pickers this year.

Even mycologists who spend their careers studying mushrooms are not certain why morels are produced in such abundance after forest fires. Generally it is believed that the wash of nutrients released by forest fires somehow triggers the crops.

But experts also suspect that morels are mycorrhizal fungi which invade the roots of living trees and other plants, establishing a mutually beneficial relationship: the fungi harvest nutrients from the soil and exchange them for sugars produced by photosynthesis within the cells of trees.

When a fire kills or injures a tree, the ending of this symbiotic relationship might

trigger the fungus to seek a new food source by producing fruiting bodies which will then release huge quantities of spores.

"Each mature morel produces millions of spores, which are released and drift away on the wind," explains Carol Domes, a Yukon government biologist with a special interest in mushrooms. "The vast majority of these spores will not produce a mycelium, but some will find a good spot and start forming threadlike structures underground which in time become the mycelium."

Domes says morels are like an apple crop. "The mycelium, or main organism of the morel, would compare to the tree itself. The morel mushroom is merely the fruiting body of the organism, roughly comparable to an apple on an apple tree," she says.

You will not find fresh morels for sale in your local grocery store because so far no one has figured out how to grow morels commercially. But every year -- if you know where to look -- you can find some natural morels growing in Yukon forests.

Common morels are a relatively easy mushroom to recognize, but Domes encourages novice mushroom pickers to go out with someone more experienced at first. "It is a common myth that we do not have any poisonous mushrooms in the North. We have false morels here, which probably will not kill you, but they could make you very sick. There are also other poisonous mushrooms in the Yukon," she says.

Tony Hill, an agrologist with the Yukon agriculture branch, is preparing for an influx of mushroom pickers that could be as large as the one that occurred in 1996, when more than 1,000 pickers converged on the territory.

The Morel Mushroom Hunting Club has already scheduled a mushroom-picking event for its members in mid-June in the Dawson City area. It will be guided by Randy Marchand, a well-known mushroom hunter who regularly picks in the Yukon.

Hill says that in 1996 the morel season peaked around July 1, but the early spring this year could advance that date, particularly if rain adds all-important moisture to the soil. Warm weather could also speed the appearance of the morels. "The fruiting starts when soil temperatures hit between 10 and 14 degrees Celsius," says Hill.

While the morel crop is really more of a forestry and a land use issue than an agricultural one, Hill says he is already fielding questions on picking morels. Pickers do not need a licence, but a land use permit might be required if they want to build a camp.

Morels lose moisture quickly so usually they are dried completely in the camps before being shipped. But at the peak of the season, high quality mushrooms will be flown out of the territory immediately after picking, often to overseas buyers. Hill visited some of the camps in 1996, and knows that some Yukon morel mushrooms ended up on plates in expensive restaurants in Europe.

"It all depends on how far they are from the Whitehorse airport because basically they have to be in Paris or Switzerland within 24 hours," he says. "Most of the buyers are working for one of two exporting companies."

Some years, expert pickers can earn good money picking morels, but much of their success depends on knowing where to go. To meet the demand for information, the Yukon government produces fire maps that show both the locations of previous fires and the all-important road networks near the burns.

Last year there were fewer fires than normal in the lower 48 states, and that fact could increase interest in the northern burn areas. Alaska is also preparing for an influx of pickers, and the University of Alaska has been offering workshops in rural communities so that local residents can take advantage of this opportunity.

Hill cautions that even real morels can be poisonous if they are eaten fresh and consumed with alcohol. "But when cooked, they are great mushrooms," he says. He also plans to hunt for morels in the Yukon this summer, picking them for personal use. "It's a lot of fun. It's like looking for gold."

For more information on morel mushrooms in the Yukon, contact Tony Hill at tony.hill@gov.yk.ca or Carol Domes at carol.domes@gov.yk.ca. Maps of the 2004 fires in the Yukon are available on-line at www.community.gov.yk.ca/firemanagement/wfmaps2004.html. Also, a government pamphlet on mushroom picking in the Yukon is available at visitor reception centres across the territory, and the Energy, Mines and Resources Department soon will have information packages on the morel mushroom industry available at various district offices.

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